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Armed Services Committee
U.S. Senate

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Mr. Chairman and members of the Subcommittee, thank you for the opportunity to testify on the National Nuclear Security Administration's (NNSA) nonproliferation Fiscal Year (FY) 2002 budget request.

The FY 2002 budget request for the Office of Defense Nuclear Nonproliferation is $773.7 million. The request covers the funding needed to support a broad range of nonproliferation goals. Specific line items include:

?? Nonproliferation and Verification Research and Development ($206,102,000)
?? International Nuclear Safety ($13,800,000),
?? Highly Enriched Uranium (HEU) Transparency Implementation ($13,950,000)
?? Arms Control and Nonproliferation ($101,500,000)
?? International Materials Protection, Control and Accounting ($138,800,000)
?? Fissile Materials Disposition ($248,089,000)
?? Program Direction ($51,459,000)

Addressing international threats to U.S. national security interests from the potential proliferation of weapons of mass destruction is one of the primary mission goals of the NNSA. These international threats derive largely from the former Soviet Union's production of enormous quantities of nuclear materials and weapons, and from potential actions by rogue nations or terrorist organizations. The NNSA is pursuing a

balanced and comprehensive approach to nonproliferation that seeks to reduce or eliminate these threats to U.S. national security interests.

NNSA has been hard at work to secure and dispose of nuclear warhead materials, at home and abroad. We are establishing methods to help prevent the unthinkable from happening the use of weapons of mass destruction in an attack on this country or our citizens. NNSA's world-class expertise at its national laboratories is vital to the success of this important effort.

I understand the Committee has a particular interest in the work NNSA is doing in Russia. Therefore, I would like to address our efforts in that regard up front, and then talk more broadly about NNSA overall nonproliferation work.

The bipartisan Baker-Cutler Report and numerous other studies in-and-outside of Government attest not only to the importance of the proliferation threats in Russia our programs are designed to address, but to the need for an overarching strategy. We are working to articulate that strategy as well as to develop and strengthen our long-range thinking in this area.

To that end, the Administration has chartered several major reviews in order to examine the appropriate national security strategy for this country. The Department and the NNSA are active participants in these on going reviews. One of these reviews is currently evaluating all U.S. nonproliferation programs with Russia. At the end of this review, I am confident we will have a comprehensive strategy for our threat reduction activities with Russia.

We can layout the United States' goals we are helping with Russia into five broad objectives.

- ?? Reduce the threat to the United States and its allies from Russian nuclear delivery systems
- ?? Reduce potential for diversion of Russian nuclear warheads to rogue states or terrorist groups
- ?? Reduce potential for diversion of Russian weapons-useable nuclear materials
- ?? Make Russian force reconstitution more difficult, time consuming and detectable
- ?? Reduce potential for diversion of nuclear-weapon/dual-use expertise and technologies.

Given this set of objectives for our work in Russia, let me describe how our activities are supporting this framework. The first objective to reduce the threat to the US and its allies from Russian nuclear delivery systems has been the principal goal of the DOD's Cooperative Threat Reduction (CTR) program. I will not deal with their myriad successes other than to note that they continue to make substantial progress in their programs.

Our next key objective is to reduce the potential of diversion of nuclear weapons. Both DOD and NNSA have programs that are working with the Russian military to improve the security of nuclear weapons storage sites in Russia. The NNSA program is with the Russian Navy and grew out of our cooperation with the Russian Navy on securing HEU materials used as reactor fuels on their ships. We feel that we are making good progress on this program. And we have excellent cooperation with the Russian Navy on this program.

Our third objective is to reduce the potential for diversion of Russian Federation weapons-useable nuclear materials. This is the flagship of NNSA's cooperation with Russia. The Materials Protection, Control, and Accounting (MPC&A) program has been working with MinAtom on securing weapons-useable nuclear materials throughout Russia. We work with the civilian sites where such materials are present and we work

at many of the military sites where the Russian weapons grade nuclear materials are stored.

The NNSA's MPC&A program is working rapidly to complete its mission, and estimates in its strategic plan that comprehensive security upgrades will be complete at all of the warhead storage locations that the Russian Navy has requested, as early as 2007, and for 603 metric tons of weapons-usable nuclear material by 2011. Since 1993, the program has completed rapid upgrades for nearly 4,000 warheads and 220 metric tons of fissile material. One programmatic goal for FY 2002 is to complete security upgrades at thirteen nuclear sites, bringing the total number of completed sites to fifty.

A part of this goal is to promote sustainable security improvements. "Sustainability" is critical to the long-term mission of the program, because we must ensure that installed MPC&A systems are maintained and operated over the long term. Sustainability also entails fostering the ability of our Russian counterparts to operate and maintain the MPC&A systems unilaterally. To help ensure sustainability, we are establishing training centers, identifying credible Russian suppliers of MPC&A equipment, helping draft national regulations and security force procedures, and establishing an information accounting system to track amounts and locations for all of Russia's nuclear material.

Furthermore, we have developed and implemented a program to consolidate material into fewer buildings and fewer sites, and to convert excess highly attractive material to a form that is less attractive to potential proliferant nations. This program reduces costs to the U.S. by limiting the number of buildings requiring security upgrades.

Through the Fissile Materials Disposition program, NNSA is responsible for disposal of surplus inventories of U.S. weapon-grade plutonium and highly enriched uranium.

We are also responsible for efforts to obtain reciprocal disposition of surplus Russian weapon-grade plutonium.

The FY 2002 Budget request will fund the completion of the mixed oxide (MOX) Fuel Fabrication Facility design and proceed with related MOX fuel qualification activities. We will continue the design of the Pit Disassembly and Conversion Facility at a reduced rate, and we will suspend the design of the Plutonium Immobilization Plant. These changes are necessary to reduce the anticipated future-year peak funding requirements associated with plans for simultaneously building three plutonium disposition facilities at the Savannah River Site. The NNSA continues to pursue the irradiation of MOX fuel in existing reactors and, at a much reduced pace, immobilization for the disposition of surplus U.S. weapon-grade plutonium. This will enable us to meet the commitments called for in the recently signed U.S.-Russia Plutonium Management and Disposition Agreement and to support the continued consolidation, cleanup, and shut down of DOE sites where surplus plutonium is stored.

Other activities planned for FY 2002 involve providing support for the development of facilities in Russia for disposition of surplus plutonium, and continuing surplus U.S. HEU disposition, including capital improvements at the Savannah River Site to support the off-specification blend-down project with the TVA. This project will eliminate tons of surplus weapons material by converting it to reactor fuel for use in TVA's reactors, which provide electric power throughout the Southeast. Equally important, this work will save the taxpayers $600 million by avoiding the cost to dispose of this surplus material as waste.

We have a number of other programs that help achieve the objective of reducing the potential for diversion of nuclear materials. Through the Second Line of Defense program we have been working with the Customs Service in Russia to upgrade the Russian capabilities to detect and interdict nuclear materials at border checkpoints and at airports. While we have made some progress in this activity, this is a huge job. The

Russian boarder is thousands of miles long, and boarders on a number of countries where we have concerns about proliferation. We may need to put more effort into this program in the future or to develop and explore practical alternatives.

The current Administration review of Russian programs will help guide us on whether or how we should direct our efforts on this issue, and how we should coordinate with other agencies that have complementary activities.

The fourth objective is to make reconstitution of the large forces and enormous nuclear weapons stockpile that existed during the Cold War more difficult. NNSA shares responsibility with DOD for programs that address this issue. For NNSA one of our problems is the size of the Russian nuclear weapons complex. The production complex of the US is significantly reduced from what it was during the Cold War, while the Russian nuclear weapons complex is basically unchanged from the Cold War.

Some of these Russian facilities may be old, but the sense is, they can still do the job of producing weapons for the Russian stockpile. As we go into an era of reduced nuclear forces, this excess capability for production could present a problem for the US. We would like the Russian complex to be reduced to a size consistent with the much-reduced stockpiles that are needed in the post-Cold War era. Concerned about the human costs of downsizing, the Russians have asked us to help them reduce the size of their weapons complex. NNSA is pursuing the Nuclear Cities Initiative whose main goal is to reduce the size of the Russian nuclear weapons complex, both its facilities and infrastructure, as well as manpower.

While the underlying national security objective is valid, I am aware that there are some serious concerns about this program and I will elaborate on the Nuclear Cities Initiative a little later in my testimony. Based on the Administration review of this and other nonproliferation programs in Russia, we may need to reconfigure the program to be more effective.

A part of this objective to make reconstitution to Cold War levels more difficult we are monitoring the HEU purchase agreement that is down-blending 500 Mt of highly enriched uranium to low enrichment material that will be used in reactor fuel. The 1993 U.S.-Russia HEU Purchase Agreement remains one of our key threat reduction achievements of the last decade. As of May 2001, we have overseen the conversion of more than 117 metric tons of HEU; this is enough material for over 4,700 nuclear devices.

Our fifth objective is to reduce the potential for diversion of nuclear weapon's or dual-use expertise and technologies. This objective captures two separate but related needs. One is that we need to work with the Russian Government to gain their cooperation on limiting the export of nuclear technology and equipment that may help countries that are trying to develop nuclear weapons. These exports are not, in our view, in the interest of either the United States or the Russian Federation, and mitigating the economic incentives that seem to propel them in this direction would help to achieve our goals.

The related issue is often referred to as the "brain drain". There are thousands of scientists that worked on the nuclear, chemical and biological weapons programs of the Soviet Union who were unemployed, underemployed, or unpaid following the breakup of the USSR. NNSA and State Department have had programs in place for a number of years to provide alternate employment to as many of these scientists as possible and to try to integrate them into the international science community.

The State Department program is the International Science and Technology Centers (ISTC). It was created in 1992 and became operational in 1994. It is a multilateral organization and has excellent international support and strong support from the Russian Government. The NNSA programs are working in close cooperation with the ISTC. While the ISTC focused on providing jobs in basic science and exploring the

possible application of technology to commercial applications, the Initiatives for Proliferation Prevention (IPP) program of NNSA has focused on the commercialization of Russian technology in partnership with US industry.

The IPP program is designed to prevent the spread of weapons of mas destruction technologies and expertise by engaging former Soviet weapons scientist. It funds non-military joint R & D projects between former Soviet weapons institutes and U.S. laboratories. The goal is identifying and creating non-military, commercial applications of weapons-related technologies. We have instituted a rigorous project review process within the U.S. government to ensure that no projects have dual-use potential. These efforts allow us valuable access to Russian scientific and technical research and development as well as transparency into the Russian weapons complex. Unlike, NCI the IPP program works in the nuclear, chemical and biological arenas and in Russia, Ukraine and Kazakhstan. As we are focusing the IPP program on commercialization, all projects must have an industry partner who provides significant funding for the project – roughly a 3:2 ratio, private sector to government funding.

Those of you who have followed the progress of both the ISTC and the IPP programs might remember that both of these took several years to become mature and develop management processes and project portfolios that clearly met the intent of the programs.

But today the commercialization efforts of the IPP program are taking off. Eight IPP projects are now commercially successful, providing 300 long-term private-sector jobs in Russia and more that $17 million in annual sales revenues. There are another 20 IPP projects poised for commercialization over the next year. We are pleased with the progress that the IPP program has made in the past couple of years.

That brings me back to NCI. While the goals of the NCI program is to reduce the size and capability of the Russian nuclear weapons complex, it must address the

unemployment that accompanies downsizing to accomplish that goal. NCI works with MinAtom to bring commercial development to the closed cities where the manpower requirements for nuclear weapons work are reduced or where entire plants stop weapons work.

This is a difficult task. Even in the U.S. when we downsize our weapons workforce or shut facilities, finding new jobs for those who are displaced is the most difficult part. But the U.S. economy is robust, and in most cases, our economy is able to absorb the extra workers within a reasonable amount of time.

In the closed cities in Russia, however, finding jobs for displaced workers is extremely difficult. There is little if any business culture, buildings are unsuitable for most western business, there are access rules, legal obstacles, and perhaps the largest difficulty is the Russian economy is smaller that it was a decade ago. But in spite of all these problems we have businesses that are interested in participating with us in working in the "closed cities". We try to provide them the necessary support to reduce their risks in putting jobs in these "closed cities", and helping them become successful. We are coordinating with the ISTC and the IPP program in this effort to develop jobs in the closed cities. However, the charters of the ISTC and the IPP program make it difficult for them to sponsor some of the types of activities that will make it more attractive for businesses to come to the closed cities; such as refurbishing buildings, and implementing manufacturing activities. With proper coordination, the combination of programs will make the prospect for successfully bringing commercial jobs to these cities much higher.

You might ask, "if the Russians are going to downsize their nuclear complex anyway, why should the U.S. spend its taxpayer dollars to help them?" The answer is, we can make the downsizing happen faster, and our involvement also gives us a window into the Russian complex. This may also allow us to have greater confidence in

any future unilateral arms reductions if we know more about what their complex looks like.

Let me review the progress that the NCI program has made thus far. The program has been operating for roughly two and a half years and has been funded for only 26 months. Currently, NCI is working in three nuclear cities. The primary focus is on Sarov (formerly known as Arzamas-16) which includes both a nuclear weapons design laboratory and a nuclear weapons assembly/disassembly plant known as the Avangard Electromechanical plant. Sarov, and Avangard specifically, is MinAtom's highest conversion priority. Therefore, it is the one city we anticipate focusing on in FY2002.

Last year, this program achieved an historic accomplishment when the Russians moved a concrete fence at the Avangard weapons facility, creating an open "Technopark" for commercial businesses. This is the first time that a Russian weapons facility has reduced its footprint as part of the nuclear weapons complex downsizing they have committed to undertake. The Russian Government has indicated that it intends to shut down two of its weapons assembly and disassembly facilities. First Deputy Minister of MinAtom Lev Ryabev stated in an international forum in January 1999 that the Russian Government planned to close down two of its four weapons assembly and disassembly facilities, beginning in 2000. This intention was recently reinforced by a letter from Minister Ryabev to the NNSA in March 2001.

Finally, I would like to address GAO's report that was just released on the NCI program. Let me first say that I was pleased to read that the GAO determined that: "DOE's effort to help Russia create sustainable commercial jobs for its weapons scientists and help downsize its nuclear weapons complex is clearly in our national security interests." The report also highlights a number of issues and areas in the program that must be addressed and be improved upon. In concert with the Administration's nonproliferation review, I am closely examining this as well as other

Russian programs in order to maximize their effectiveness, and ensure they are operating in a manner consistent with national objectives and coordinated with other U.S. government nonproliferation activities.

It should be noted that to produce this report, the GAO review team obtained cost data from DOE headquarters and the national laboratories, reviewed NCI projects to determine their impact on program goals and objectives, and traveled to Russia to visit Sarov to meet with MinAtom officials. Finally, the GAO also met with proponents of the European Nuclear Cities Initiative. NNSA NCI program staff were active participants in this review, and we are prepared to implement any and all policy recommendations.

The report's focus on job creation as the primary measure of NCI program success differs from our perspective of the primary goal of the program, and does not fully appreciate U.S. experience with downsizing its own nuclear weapons complex. There are multiple measures of success and we are tracking and reporting on them. For example, NCI's performance metrics includes facility downsizing, infrastructure upgraded or created, credits and investments provide to local businesses and so on.

The GAO report cites MinAtom official dissatisfaction with the amount of NCI funds spent in Russia. The bottom line on funding is that MinAtom officials would prefer that monies be provided directly to them, to carry out major projects as they see fit. This top-down central planning approach has failed Russia in the past and will continue to fail. In the United States, we have learned that successful economic diversification is based on an active partnership among government, industry and the community. We are attempting to pass on this knowledge and experience to our Russian colleagues by working directly with the cities and institutes.

In the initial start-up phase of the NCI program, the preponderance of funds were spent in the U.S. at the national laboratories. We relied on the labs to make the first contacts for the program since they had the ongoing, long-standing relationships. The

labs also were integral in developing the projects jointly, and then providing the project oversight required. Now that the NCI program is entering a new phase, the role of the labs is being reduced and we anticipate meeting the Congressionally-mandated 51% of funds spent in Russia in FY01. We have instituted new processes, including financial reporting procedures that will help us meet that goal. Additionally, we have negotiated with some labs a reduction in their project management costs. Overall, lab activities will be reduced in coming years as the program attracts more commercial partners. We firmly believe that oversight of projects is important and that requires lab participation.

The GAO noted that some project funding proposals have been submitted to both NCI and IPP, in the hope of maximizing the chances of receiving funding. This does not indicate that the two programs are identical. All project proposals undergo a vigorous interagency vetting and review process to ensure, among other things, that scientists are not getting funded twice for the same work.

That said, I take the GAO observations and recommendations very seriously and thus tasked my management team to reexamine possible options for consolidating the NCI and IPP programs in an effort to achieve cost savings and other programmatic and administrative efficiencies. However, keep in mind this involves complex issues, and rather than rush to get the job done, I want to make sure that we do this right the first time. Therefore, I am waiting for the completion of the NSC reviews that are now underway, and the recommendations from my management team.

As we continue to move forward, I am confident that much-needed changes will occur. This is the nature of these types of programs. In fact, the IPP program, in its early years, experienced similar growing pains and was the subject of significant criticism. IPP has now become a successful program. We want to make sure that NCI is on a similar path. Furthermore, the U.S. Government's involvement will decrease over time, and business participation will grow. This increased role for business will lead the Russians toward self-sustaining civilian and commercial enterprises in the city,

and provide the basis for the U.S. exit strategy. Our plans are to continue with a strong focus on Sarov.

Now, I would like to quickly touch on the rest of NNSA 's nonproliferation programs. These programs address the issues of detecting, deterring, and impeding proliferation and the use of weapons of mass destruction. In addition to the programs already described, NN has extensive efforts in research and development (R&D) and arms control arenas. Our active role in the U.S. nonproliferation interagency community derives, in large measure, from the nuclear expertise found in the national laboratories. NNSA supports U.S. national, bilateral, and multilateral efforts to reduce the threat posed by the proliferation of weapons of mass destruction.

Research and Development Programs

A key nonproliferation strategy is to enhance the capability to detect weapons of mass destruction. The NNSA goal of integrating technical talent and policy expertise is evident in the Nonproliferation and Verification R&D Program, which enhances U.S. national security through needs-driven R&D, with an emphasis on developing technologies to detect nuclear, chemical, and biological proliferation, and to monitor nuclear explosions.

The following accomplishment is just one indication of the type of activities NNSA is involved with in the R&D area. NNSA is proud that, last year, we achieved a significant milestone in one of our R&D programs: The Multispectral Thermal Imager satellite was launched in March 2000. This small research satellite, designed and built by a team of NNSA laboratories and industry partners, will develop and test remote-sensing concepts that will add to our country's ability to monitor nuclear proliferation. The satellite has already achieved most of its design objectives.

The Proliferation Detection program will develop the requisite technologies to detect nuclear proliferation. Our unchallenged lead responsibility for nuclear nonproliferation technology derives from the expertise and knowledge base resident in our nuclear weapons complex, and it provides a technology template for the detection of activities related to all weapons of mass destruction. The objectives of the detection program are

- to produce technologies that lead to prototype demonstrations and resultant remote proliferation detection systems,
- to strengthen our detection capabilities to respond to current and projected proliferation threats, and
- to develop technologies that are subsequently made available to a wide range of government users, including DOD and the intelligence community.

The separate, yet closely related, Proliferation Deterrence program seeks to develop technical options to prevent and deter proliferation of nuclear weapon technology and fissile materials. Research is focused on developing integrated sensor systems that will improve the accuracy and timeliness of information.

With the FY 2002 Budget, we will continue to develop and demonstrate innovative remote sensing, sampling, and analysis technologies needed to improve early detection of a proliferant nation's nuclear weapons program or non-compliance with international treaties and agreements, as well as tracking foreign special nuclear materials.

The Nuclear Explosion Monitoring Program is designed to provide the U.S. with the technical capability to detect nuclear explosions. Specifically, NNSA technical experts are working to develop and deploy sensors and algorithms that enable the U.S. to meet its national requirements for detecting, locating, identifying, and characterizing nuclear explosions in the atmosphere, in space, underground, or underwater.

To meet threats posed by chemical and biological agents, the NNSA draws upon the diverse and extensive expertise of its national laboratories. The goal of the Chemical and Biological National Security Program is to develop, demonstrate, and deliver technologies and systems that will lead to major improvements in U.S. capability to prepare for, and respond to, chemical or biological attacks against civilian populations. The NNSA is the primary agency developing non-medical technical solutions for this challenge. Our experts are involved in a broad interagency program to develop sensors that could detect the terrorist use of a biological agent at a large outdoor event, such as the Super Bowl or the Olympics.

Arms Control and Nonproliferation

Another key strategy is promoting arms control and nonproliferation treaties, promoting agreements, and regimes, and developing the associated technologies to support them. The mission of the Office of Arms Control and Nonproliferation is to detect, prevent, and reverse the proliferation of weapons of mass destruction (WMD) materials, technology, and expertise. It is the focal point within the NNSA for activities that support the President's nonproliferation and international security policies, goals, and objectives, as well as those activities mandated by statute. The program provides policy and technical expertise and leadership for NNSA and the Department in interagency, bilateral, and multilateral for nonproliferation and international security matters. Several projects that had been initiated last year are not proceeding currently. The NNSA will not be proceeding with the Separated Civil Plutonium activities, due to Russian nuclear cooperation with Iran. Funding for Spent Fuel Storage and Geological Repository in Russia are on hold, to allow time for the new Administration's interagency policy review.

Nonproliferation Programs Outside of Russia

While the bulk of our nonproliferation activities take place in Russia, the NNSA is also involved in nonproliferation and arms-control-regime projects in many other parts of the world. For instance, since 1995, the U.S. and Kazakhstan have been working to reduce proliferation risks associated with three tons of weapons-grade plutonium. This material, which is located at the BN-350 fast-breeder reactor in Aktau, Kazakhstan, contains enough plutonium to manufacture hundreds of nuclear weapons. Furthermore, unlike most spent fuel, the majority the BN-350 spent fuel material poses no significant radiation hazard to a would-be thief. The project has reduced the threat to our national security posed by the vulnerability of the weapons-grade material. Further assistance to Kazakhstan, in implementing the secure long-term storage of the BN-350 plutonium-rich fuel, will be curtailed.

The Aktau project will continue to support the IAEA in the implementation of internationally accepted safeguards measures over the material, continue to provide non-weapons-related employment for nuclear scientists in Kazakhstan, and provide security and international safeguards measures for the transportation and long-term dry storage facility for the BN-350 material.

NNSA experts are also actively working in North Korea to reverse and prevent proliferation of nuclear weapons, by securing approximately thirty kilograms of weapon-grade plutonium contained in Nyongbyon 5 megawatt reactor spent fuel. Similar to the objectives of the Aktau project, NNSA technicians have

- packaged the 8,000 assemblies in canisters and placed those canisters under IAEA monitoring, and
- performed field operations to maintain packaged spent fuel in a safe condition, appropriate for future shipment.

We are also supporting the IAEA in the implementation of verification and international safeguards of the material, while helping to prepare plans to support future shipment and disposition of spent fuel.

In an effort to impede the use of weapons of mass destruction, the NNSA supports several projects targeted at reducing the amount of fissile material that could be available to potential proliferators to fashion into a nuclear device. In the Reduced Enrichment for Research and Test Reactors (RERTR) Program, NNSA continues to work to reduce international commerce in civil HEU, by developing technologies to convert foreign and domestic research and test reactors from HEU to LEU.

NNSA is also active in strengthening regional security and nonproliferation, not only on the Korean peninsula, but also throughout East Asia, South Asia, and the Middle East. We are doing this by participating in U.S. policymaking, promoting regional security dialogues, and sharing with key states in these regions the expertise of the national laboratories on technical measures to implement nonproliferation agreements. Under a program to strengthen the Biological and Toxin Weapons Convention (BWC) regime, NNSA supports the U.S. in its efforts to negotiate a legally binding protocol to the 1972 BWC. This protocol is part of a larger effort to deter noncompliance with the BWC and to reinforce the global norm against the proliferation of biological weapons. Our technical experts facilitate U.S. commerce through implementation of bilateral peaceful nuclear cooperation agreements with our nuclear trading partners.

International Nuclear Safety and Cooperation

Another strategy for enhancing nuclear security is to improve operational safety and safety systems at nuclear facilities of concern. The NNSA is working to reduce safety risks at the sixty-six operating, Soviet-designed nuclear-power reactors in nine countries, through the International Nuclear Safety and Cooperation program. We plan to complete safety upgrades for these reactors by 2006. There are three reactors in

Russia that are to be shut down, as part of DOD's program to eliminate the production of weapons-grade plutonium. These three high-risk reactors, at secured sites, are the oldest operating reactors in Russia, and have not received any safety upgrades under foreign cooperation. Safety upgrades at these production reactors, prior to their planned shutdown in 2006, are among our highest priorities. However, the scope of activities for improved safe operation will be limited.

We are encouraged not just by our progress to address nuclear safety at operating reactors, but by the early closure of older reactors as well. The Ukrainian government shutdown Chornobyl's sole operational reactor in December 2000, as planned. Our efforts to support the construction of a replacement heat plant at Chornobyl, for decontamination and decommissioning purposes, are also proceeding well. We were pleased when Kazakhstan also made the tough decision to shut down its BN-350 reactor. Our attention is now focused on plans for decommissioning and decontaminating the reactor's sodium coolant, which will ensure that this reactor can never be restarted. The FY 2002 Budget request will allow us to complete one full-scope, nuclear plant training simulator, each, in Russia, Ukraine, and Slovakia. We will also strive for the completion of operational safety improvements at all plants in Russia and Ukraine. Safety procedure and reactor in-depth safety assessments will proceed, albeit at a delayed pace.

CONCLUSION

Mr. Chairman, I believe that NNSA is on the right course. The NNSA enjoys the strong support and endorsement of Secretary of Energy Spencer Abraham. It is the right idea to bring together the national security missions of DOE, and to focus our work with clear goals and plans, sharp lines of authority, and a strong view to the future.

The scientists and engineers that are stewards of our nuclear arsenal have also been making important technical contributions to controlling, detecting, and

deterring the use of weapons of mass destruction. NNSA's unique contribution is evident in the caliber of personnel working on these complex, interrelated threat reduction programs. Their expertise resident in our national laboratories has been honed by years of working in support of the U.S. nuclear complex. Our technical experts are ready and willing to share their nonproliferation and counter-proliferation experience with their counterparts in Russia.

As a nation, we may face no greater challenge than preventing weapons or weapons usable materials from falling into the hands of those who would use them against the U.S. or our allies. It has been more than a decade since the Berlin Wall fell, opening a new era in history. In many ways, we live in a more dangerous world now, since the demise of the Soviet Union. The threat to our safety and international security is more diffuse, which makes it harder to defend against. Rather than one monolithic threat, we must be prepared against rogue nations or terrorist organizations with interests inimical to ours. I am very proud of the nonproliferation programs that are rightfully part of the defense nuclear security enterprise. The review being conducted at the present time by the White House is timely and I am confident it will reveal that the NNSA's programs are making solid contributions to the national security of the United States.

Again, I thank the members of this Panel for their commitment and support of our mission, and for your support of the people of NNSA who actually do the work and accomplish the mission: scientists, engineers, technicians, policy planners, administrators and so many others.